

EXHIBIT C

Claim 10	Public Documentation
	<p>In the example above, the base station determines that the first frequency spectrum resource (BWP₃) with 20MHz of bandwidth does not have sufficient bandwidth and, therefore, is sub-optimal when compared to the second frequency spectrum resource (BWP₁) with 40 MHz.</p>
<p>[10d] in response to the determination that the first frequency spectrum resource is the sub-optimal resource, assign the first frequency spectrum resource to a shared resource pool; and</p>	<p>The processor(s) in the Accused Instrumentalities are configured to in response to the determination that the first frequency spectrum resource is the sub-optimal resource, assign the first frequency spectrum resource to a shared resource pool.</p> <p>For example, the handover mechanism referred to previously is used to add/remove second component carrier (SCells). In handover, UE measurements are used to decide on the best serving cell, or carrier in CA. The same mechanism as CA is used for adding/removing SUL. Previously it was shown that gNB is responsible for making radio resource decisions. By default, all available frequency resources are in a “Shared Resource Pool.”</p>

B.1 Supplementary Uplink

To improve UL coverage for high frequency scenarios, SUL can be configured (see TS 38.101 [18]). With SUL, the UE is configured with 2 ULs for one DL of the same cell as depicted on Figure B.1-1 below:

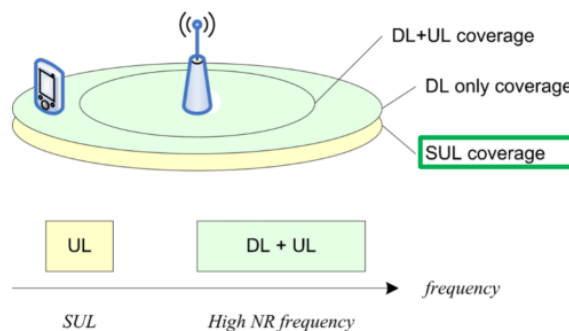


Figure B.1-1: Example of Supplementary Uplink

(3GPP TS 38.300 V2.0.0 (2017-12), § B.1).

7.7 Carrier Aggregation

When CA is configured, the UE only has one RRC connection with the network. At RRC connection establishment/re-establishment/handover, one serving cell provides the NAS mobility information, and at RRC connection re-establishment/handover, one serving cell provides the security input. This cell is referred to as the Primary Cell (PCell). Depending on UE capabilities, Secondary Cells (SCells) can be configured to form together with the PCell a set of serving cells. The configured set of serving cells for a UE therefore always consists of one PCell and one or more SCells.

The reconfiguration, addition and removal of SCells can be performed by RRC. At intra-NR handover, RRC can also add, remove, or reconfigure SCells for usage with the target PCell. When adding a new SCell, dedicated RRC signalling is used for sending all required system information of the SCell i.e. while in connected mode, UEs need not acquire broadcast system information directly from the SCells.

(3GPP TS 38.300 V2.0.0 (2017-12), § 7.7).

As a further and/or alternative example, the first frequency spectrum resource may be a bandwidth part:

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	<p>4.4.5 Bandwidth part</p> <p>A bandwidth part is a subset of contiguous common resource blocks defined in subclause 4.4.4.3 for a given numerology μ_i in bandwidth part on a given carrier. The starting position $N_{\text{BWP},i}^{\text{start},\mu}$ and the number of resource blocks $N_{\text{BWP},i}^{\text{size},\mu}$ in a bandwidth part shall fulfil $N_{\text{grid},x}^{\text{start},\mu} \leq N_{\text{BWP},i}^{\text{start},\mu} < N_{\text{grid},x}^{\text{start},\mu} + N_{\text{grid},x}^{\text{size},\mu}$ and $N_{\text{grid},x}^{\text{start},\mu} < N_{\text{BWP},i}^{\text{start},\mu} + N_{\text{BWP},i}^{\text{size},\mu} \leq N_{\text{grid},x}^{\text{start},\mu} + N_{\text{grid},x}^{\text{size},\mu}$, respectively. Configuration of a bandwidth part is described in clause 12 of [5, TS 38.213].</p> <p>A UE can be configured with up to four bandwidth parts in the downlink with a single downlink bandwidth part being active at a given time. The UE is not expected to receive PDSCH, PDCCH, or CSI-RS (except for RRM) outside an active bandwidth part.</p> <p>A UE can be configured with up to four bandwidth parts in the uplink with a single uplink bandwidth part being active at a given time. If a UE is configured with a supplementary uplink, the UE can in addition be configured with up to four bandwidth parts in the supplementary uplink with a single supplementary uplink bandwidth part being active at a given time. The UE shall not transmit PUSCH or PUCCH outside an active bandwidth part. For an active cell, the UE shall not transmit SRS outside an active bandwidth part.</p> <p>Unless otherwise noted, the description in this specification applies to each of the bandwidth parts. When there is no risk of confusion, the index μ may be dropped from $N_{\text{BWP},i}^{\text{start},\mu}$, $N_{\text{BWP},i}^{\text{size},\mu}$, $N_{\text{grid},x}^{\text{start},\mu}$, and $N_{\text{grid},x}^{\text{size},\mu}$.</p> <p>(3GPP TS 38.211 v17.2.0, § 4.4.5)</p> <p>As referenced above, out of the maximum of 4 assigned bandwidth parts, the UE can only operate in a single BWP at any given time. Previously it was shown that the base station is responsible for making radio resource decisions. By default, all available frequency resources are in a shared resource pool. If UE is instructed to move to a new bandwidth part, the old bandwidth part is reassigned to the shared resource pool.</p>
[10e] a scheduler module coupled to the processor and configured to:	<p>The Accused Instrumentalities comprise a scheduler module coupled to the processor.</p> <p>For example, the Accused Instrumentalities comprise a specific hardware or software structure corresponding to the claimed scheduler module. For example, 3GPP documents specify base station messages for scheduling the frequency resource that is used.</p>